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Optical Manufacturing and Testing II (Conference Title) — **H. Philip Stahl** (Conference Chair)

Specification of optical components in the high average power environment

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Prefer oral presentation

Abstract (<250 words):
Optical component specifications for the high-average-power lasers and transport system used in the Atomic Vapor Laser Isotope Separation (AVLIS) plant must address the demanding system performance requirements. This need for high performance optics has to be balanced against the practical desire to reduce the supply risks of cost and schedule. This is addressed in optical system design, careful planning with the optical industry, demonstration of plant quality parts, qualification of optical suppliers and processes, a comprehensive procedure for evaluation and test, and a plan for corrective action.

Keywords: optical specifications, precision optics, subsurface damage, low absorption materials and coatings, microscopic surface and coating defects, laser damage threshold

Biography:
John R. Taylor is group leader for Optical Engineering and project engineer for Optical Refurbishment Systems and Supply Assurance for the AVLIS Plant Project at LLNL. He has supported optical engineering for AVLIS technology for 14 years. He holds B.S. and M.S. degrees in physics with previous experience in aerospace and military systems.